

Claims

1. A complex oxide having a composition represented by the formula $\text{La}_v\text{M}^1_w\text{Ni}_x\text{M}^2_y\text{O}_z$; wherein M^1 is at least one element selected from the group consisting of Na, K, Sr, Ca, Bi and Nd; M^2 is at least one element selected from the group consisting of Ti, V, Cr, Mn, Fe, Co and Cu; and the subscripts are numbers which respectively satisfy $0.5 \leq v \leq 1.2$; $0 \leq w \leq 0.5$; $0.5 \leq x \leq 1.2$; $0.01 \leq y \leq 0.5$; and $2.8 \leq z \leq 3.2$, the complex oxide having a negative Seebeck coefficient at 100°C or higher.
2. A complex oxide having a composition represented by the formula $\text{La}_v\text{M}^1_w\text{Ni}_x\text{M}^2_y\text{O}_z$; wherein M^1 is at least one element selected from the group consisting of Na, K, Sr, Ca, Bi and Nd; M^2 is at least one element selected from the group consisting of Ti, V, Cr, Mn, Fe, Co and Cu; and the subscripts are numbers which respectively satisfy $0.5 \leq v \leq 1.2$; $0 \leq w \leq 0.5$; $0.5 \leq x \leq 1.2$; $0.01 \leq y \leq 0.5$; and $2.8 \leq z \leq 3.2$, the complex oxide having an electrical resistivity of $10 \text{ m}\Omega\text{cm}$ or less at 100°C or higher.
3. An n-type thermoelectric material comprising the complex oxide of Claim 1.
4. An n-type thermoelectric material comprising the complex oxide of Claim 2.
5. A thermoelectric module comprising the n-type thermoelectric material of Claim 3.
6. A thermoelectric module comprising the n-type thermoelectric material of Claim 4.